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| 10/811,421 | 03/26/2004 | Fusao Ishiguchi | 04536.034001 | 2620 |
| 22511 | 7590 | 12/07/2007 | | |
| OSHA LIANG L.L.P. 1221 MCKINNEY STREET SUITE 2800 HOUSTON, TX 77010 | | | EXAMINER HAILU, TESHOME | |
| | | | ART UNIT 2139 | PAPER NUMBER |
| | | | NOTIFICATION DATE 12/07/2007 | DELIVERY MODE ELECTRONIC |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/811,421

Applicant(s)

ISHIGUCHI, FUSAO

Examiner

Teshome Hailu

Art Unit

2139

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-8 are pending.
2. This office action is in reply to an amendment filed on September 20, 2007. Claims 1-8 have been amended.

Response to Amendment

3. Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection.

Specification

4. The disclosure is objected to because of the following informalities: Paragraph 31 of the disclosure teaches the invention in reference to FIG. 4. The block numbers (43) stated in this paragraph does not match with FIG. 4. Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doiron et al (Doiron), US 5,481,610, and further in view of Lotspiech, US 6,883,097.

As per claim 1 Doiron discloses:

Equipment for a digital video disc, comprising: a memory in which key data associated with information on a digital video disc is recorded in advance; (abstract, line 1-6, Doiron disclosed about digital radio key storage for different cryptosystems (DES, VGE, VGS, etc.). According to Doiron, the cryptographic keys are stored in non-volatile memory such as EEPROM). Also see fig. 2.

Means for processing the information on said digital video disc using said key data read from said memory; (column 1, line 5-13, Doiron teach about digital radios and secure mode of digital radios that secure messages by encrypting and decrypting).

Doiron does not explicitly disclose, the information on a digital video disk. However, on the same field of endeavor, Lotspiech teaches this limitation as, (abstract, line 1-7, Lotspiech disclosed about the system of protecting content on recordable media (DVD, Flash memory media) by providing a media key block for encrypting information on recordable media).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention was made, to modify the teaching of Doiron and include the above limitation using the teaching of Lotspiech. The modification would be obvious to one skilled in the art to substitute one method for the other to achieve the predictable result of securing information in electronic media using the key data stored in memory.

Wherein random data is written around said key data in said memory. (Column 4, line 18-37, Doiron disclosed about hiding the cryptographic keys by burying somewhere in a pseudo-random data. As a result, the stored key itself looks like the stored random data and it would be hard for an attacker to identify the cryptographic keys from the random data). Also see the table in fig.3

As per claim 2 Doiron discloses:

The equipment for a digital video disc according to claim 1, wherein said key data is an encryption key for equipment for encrypting and recording the information on said digital video disc.

(Column 8, line 1-33, Doiron disclosed about EEPROM 76 that stores a key table 78 containing cryptographic keys to be used for encrypting and decrypting purpose by encryptor/decryptor 74).

As per claims 3 and 4 Doiron discloses:

The equipment for a digital video disc according to claim 2, wherein said key data is a decryption key for equipment for decrypting the information read from said digital video disc. (Column 8, line 1-33, Doiron disclosed about EEPROM 76 that stores a key table 78 containing cryptographic keys to be used for encrypting and decrypting purpose by encryptor/decryptor 74).

As per claims 5 and 8 Doiron discloses:

A method of recording in advance prescribed information to be protected against unauthorized access in a memory, comprising the steps of: (column 9, line 33- 52, Doiron teach how the meaningful data stored in memory with random data 88 and also disclosed that it is very difficult for an attacker to identify the meaningful information like cryptographic keys from the random data). Also see the memory table on fig. 3.

Writing said prescribed information in an unused area of said memory; (abstract, line 1-6, Doiron disclosed about digital radio key storage for different cryptosystems (DES, VGE, VGS, etc.). According to Doiron, the cryptographic keys are stored in non-volatile memory such as EEPROM). According to the application, prescribed information is a key data.

Writing random data in an area within said unused area adjacent to said prescribed information written in said step of writing. (Column 4, line 18-37, Doiron disclosed about hiding the cryptographic keys by burying somewhere in a pseudo-random data. As a result, the stored key itself looks like the stored random data and it would be hard for an attacker to identify the cryptographic keys from the random data). Also see random data 88d, 88e and cryptographic key stored in memory table (fig.3).

As per claim 6 Doiron discloses:

The method of recording prescribed information according to claim 5, wherein said memory is mounted on equipment for a digital video disc, (see the EEPROM on fig. 2).

Said prescribed information is key data associated with information on a digital video disc. (Column 9, line 33-52, Doiron teach how the meaningful information like cryptographic keys stored in memory).

As per claim 7, Doiron discloses:

The method of recording prescribed information according to claim 5, wherein said prescribed information is a password. (Column 8, line 1-33, Doiron disclosed about EEPROM 76 that stores a key table 78 containing cryptographic keys to be used for encrypting and decrypting purpose by encryptor/decryptor 74).

Conclusion

7. The prior art made or record and not relied upon is considered pertinent to applicant's disclosure.

TITLE: Optical disc copy management system, US 6,535,858.

TITLE: System for copy protection of recorded information, US 6,580,682.

TITLE: Data processing device, Data storage device, Data processing method, and Program providing medium for storing content protected under high security management, US 6,834,333.

TITLE: Public key certificate revocation list generation apparatus, Revocation judgment apparatus, and Authentication system, US Pub. Number 2003/0217265.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Teshome Hailu whose telephone number is (571) 270-3159. The examiner can normally be reached on Mon-Fri 7:30a.m. to 5:00p.m. PST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Teshome Hailu

November 30, 2007.


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